

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/693,025	10/20/2000	Bruce E. Randall	99P7935US01 (1505-0093)	8049	
7590 12/23/2003			EXAMINER		
Siemens Corporation			CHERRY, STEPHEN J		
Intellectual Property Department 186 Wood Avenue South			ART UNIT	PAPER NUMBER	
Iselin, NJ 08830			2863	2863	
			DATE MAILED: 12/23/2003	3	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commons	09/693,025	RANDALL, BRUCE E.					
Office Action Summary	Examiner	Art Unit					
	Stephen J. Cherry	2863 UW					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on 14 O	ctober 2003.						
2a) This action is FINAL . 2b) ∑ This	This action is FINAL . 2b)⊠ This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-36 is/are pending in the application							
4a) Of the above claim(s) 1-15 and 27-36 is/are	4a) Of the above claim(s) 1-15 and 27-36 is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	Claim(s) is/are allowed.						
s)⊠ Claim(s) <u>16-19,25 and 26</u> is/are rejected.							
7)⊠ Claim(s) <u>20-24</u> is/are objected to.	☑ Claim(s) <u>20-24</u> is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>17 December 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Ex	kaminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. §§ 119 and 120							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document	s have been received. s have been received in Applicati	ion No					
Copies of the certified copies of the prio application from the International Bureat See the attached detailed Office action for a list	u (PCT Rule 17.2(a)). of the certified copies not receive	ed.					
 13) Acknowledgment is made of a claim for domestic since a specific reference was included in the firm 37 CFR 1.78. a) ☐ The translation of the foreign language pro 	st sentence of the specification of	r in an Application Data Sheet.					
14) Acknowledgment is made of a claim for domesti reference was included in the first sentence of the	ic priority under 35 U.S.C. §§ 120	and/or 121 since a specific					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)					

Art Unit: 2863

DETAILED ACTION

Election/Restrictions

Claims 1-15, and 27-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The disclosure is objected to because of the following informalities: Page 2 of the specification recites an equation for energy use which appears to be missing a summation symbol and sample time differential.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-19, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,619,142 to Schweer et al.

Claim 16 recites, as disclosed by Schweer, et al:

Art Unit: 2863

16. An apparatus for use in an electricity meter, the electricity operably coupled

through an external transformer ('142, 10) to measure electricity consumption on a power line ('142, col. 3, line 34); the apparatus operable to compensate for measurement errors of an external transformer ('142, col. 1, line 53), the apparatus comprising:

- a) a memory storing data representative of at least one error rating for the external transformer ('142, col. 8, line 50 to col. 10, line 15, "slope" and "offset");
- b) a processing circuit ('142, 72, col. 6, line 2) operable to obtain at least one electricity consumption measurement value, the at least one electricity consumption measurement value comprising either a sampled current value or a sampled voltage value ('142, col. 7, line 40), and adjust the at least one electricity consumption measurement value using at least a portion of the stored data ('142, col. 8, line 50 to col. 10, line 15).

Claim 17 recites, as disclosed by Schweer, et al:

17. The apparatus of claim 16 wherein the processing circuit is further operable to: obtain at least one error rating comprising a ratio error rating for the external transformer ('142, col. 8, line 50 to col. 10, line 15, "slope"); obtain at least one electricity consumption measurement value comprising a sampled current value ('142, col. 7, line 42); and adjust the

Art Unit: 2863

sampled current value using the stored data representative of the ratio error rating ('142, col. 9, lines 15-55).

Claim 18 recites, as disclosed by Schweer, et al:

18. The apparatus of claim 16 wherein the processing circuit is further operable to: obtain at least one error rating comprising a phase error rating for the external transformer; and adjust at least one electricity consumption measurement value using the stored data representative of the phase error ('142, col. 57 to col. 10, line 15, including "slope" factor).

Claim 19 recites, as disclosed by Schweer, et al:

19. The apparatus of claim 16 wherein the processing circuit is further operable to adjust the at least one electricity consumption measurement value by multiplying either the at least one electricity consumption measurement value or a phase shifted electricity compensation measurement value by a dynamic compensation factor ('142, col. 7, line 8 and col. 9, lines 15-55).

Claim 25 recites, as disclosed by Schweer, et al:

25. The apparatus of claim 16 wherein the processing circuit includes a digital signal processor ('142, 72).

Art Unit: 2863

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,619,142 to Schweer et al in view or Horowitz and Hill.

The claim recites, as disclosed by Schweer:

An apparatus for use in an electricity meter, the electricity operably coupled through an external transformer ('142, 10) to measure electricity consumption on a power line ('142, col. 3, line 34); the apparatus operable to compensate for measurement errors of an external transformer ('142, col. 1, line 53), the apparatus comprising:

- a) a memory storing data representative of at least one error rating for the external transformer ('142, col. 8, line 50 to col. 10, line 15, "slope" and "offset");
- b) a processing circuit ('142, 72, col. 6, line 2) operable to obtain at least one electricity consumption measurement value, the at least one electricity consumption measurement value comprising either a sampled current value or a sampled voltage value ('142, col. 7, line 40), and adjust the at least one electricity consumption measurement value using at least a portion of the stored data ('142, col. 8, line 50 to col. 10, line 15).

Art Unit: 2863

However, Schweer does not disclose the use of EEPROMS for use as the memory unit ('142, 73).

The claim further discloses an EEPROM, as disclosed by Horowitz and Hill:

"wherein the memory includes an EEPROM." (Horowitz and Hill, "The Art

of Electronics", p. 502)

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an EEPROM in the memory unit of Schweer to allow the data to be retained while power is off and also allow the information to be changed (see Horowitz and Hill, p. 502)

Allowable Subject Matter

Claims 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The independent claims recite "the processing circuit is further operable to adjust the at least one electricity consumption measurement value by multiplying either the at least one electricity consumption measurement value or the phase shifted electricity consumption measurement value by the dynamic compensation factor, the dynamic compensation factor varying with respect to an average electricity consumption measurement

Page 7

value". This feature in combination with the remaining claimed structure avoids the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Cherry whose telephone number is (703) 305-0425. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0719.

SJC

John Pincw Superficent Stant Examiner Factors visu Center 2800